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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/818,936

03/28/2001

Walter Eevers

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7590

12/08/2006

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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,936

Applicant(s)

EEVERS ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/10/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

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1. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the limitation that the adhesive layer is coextensive with the perforated layer and does not provide support for the limitation that the adhesive is provided "only" on one side of the perforated tape. The specification states that the adhesive is "typically applied on one side", but this is different than teaching "only" applying on one side since "only" excludes applying on the other side and the concept of excluding coating on the other side is not taught in the specification. The portions of the specification pointed to by Applicant as providing support state how the adhesive layer is applied but do not state where the adhesive layer is applied, such as over the entire surface of the film.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the recitation that the semiconductors are processed by a laser beam guided by a water stream renders the claim vague and indefinite since the claim does not positively recite a semiconductor as being part of the claimed invention, but instead recites a tape for use in processing semiconductors. It is not clear whether applicant is intending to claim a combination of the tape and a semiconductor, which would be a different invention, or is setting forth a statement of

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intended use. Since applicant has already received an action on the merits for the invention of an adhesive tape, it will be presumed that the limitation regarding processing the semiconductors with a laser beam guided by a water stream is a statement of intended use.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP09321084, (equivalent to U.S. Patent No. 6,114,753). JP '084 discloses a tape to which a semiconductor wafer or material can be bonded comprising a support structure and adhesive layer(s) deposited on the support structure. See col. 3, lines 31-47. The support structure can be a porous material such as a mesh or a fabric. See col. 3, lines 31-47; col. 7, lines 34-55; col. 13, lines 14-20, embodiment 11. It is noted that Applicant's specification at page 2, fourth full paragraph states that fabrics are encompassed by the recitation of "film" in the instant claims. The adhesive layers of JP '084 are not perforated. The adhesive can be

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a thermoplastic or thermosetting material and can comprise acrylate resins, as well as rubber based adhesives. See col. 6, lines 9-45. JP '084 does not specifically disclose the cavity ratio, elongation or tensile strength of the material. However, with regard to the cavity ratio, JP '084 teaches employing a porous mesh film or a fabric and therefore JP '084 appears to teach the identical structure and therefore the material of JP '084 would either inherently possess the claimed cavity ratio, elongation, and tensile strength claimed or else it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the appropriate cavity ratio, tensile strength and elongation through the process of routine experimentation which resulted in a tape having the desired adhesive properties, bonding between the support and the adhesive as well as between the tape and the semiconductor device. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention the examiner has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02. With regard to the limitation that the adhesive is applied on only one side of the film, JP '084 teaches that the tape is can be a three layer structure but can also be a structure wherein the porous substrate is impregnated with the adhesive which would correspond to the claimed two layered structure. See col. 3, lines 40-42. With regard to the limitation that the semiconductor is processed by laser beams, the instant invention is drawn to an adhesive tape. The limitations regarding how the semiconductor is processed is at best a statement

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regarding an intended use of the tape, and since the structure of JP '084 is the same as the claimed structure, the structure of JP '084 would be capable of performing the intended use.

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP09321084, (equivalent to U.S. Patent No. 6,114,753). JP '084 discloses a tape to which a semiconductor wafer or material can be bonded as set forth above. JP '084 does not disclose the claimed aperture size. However, JP '084 teaches that the presence of apertures is helpful in the support structure because it improves the anti reflow properly at the moisture absorbing time by controlling the adhesion area. See col. 7, lines 45-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the size of the apertures through the process of routine experimentation, motivated by the teaching of JP '084 that the presence and size of the apertures improves the anti reflow properly at the moisture absorbing time by controlling the adhesion area.

6. The Declaration under 37 CFR 1.132 filed 10/10/06 is insufficient to overcome the rejection of claims 1-9 based upon 112 1st paragraph as including new matter as set forth in the last Office action because: the Declaration states that as one of skill in the art the specification conveys to the Declarant that the two layers of film and adhesive are contiguous, however, the affidavit does not point to portions of the specification which clearly set this forth and therefore the rejection is maintained.

7. Applicant's arguments filed 10/10/06 have been fully considered but they are not persuasive. Applicant argues that JP '084 does not teach that the adhesive is only

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applied to one side of the film. However, as set forth above, JP '084 teaches that the structure of the adhesive tape is not limited and can comprise a homogenous structure, a three layered structure, or a structure wherein the porous substrate layer is impregnated with the adhesive which would correspond to the claimed two layered structure.

8. Applicant argues that the JP '084 does not teach that the semiconductor wafers and/or semiconductor related materials are processed by a laser beam guided by a water stream. However, the instant claims relate to an adhesive tape. The claims do not even recite a semiconductor, but instead recite a tape for processing semiconductors. Therefore, the limitations regarding how the semiconductors, which are not a part of the claimed subject matter, are processed do not serve to limit the structure of the claimed invention which is an adhesive tape, and are presumed to be statements of intended use. Since the structure of JP '084 appears to be the same as the claimed invention, it presumably is capable of performing the intended use. Therefore, the rejection is maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.


Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c